

NBC-MS/ 3,0-93K/R4AQ SCO - Bus system cable



1420517

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Assembled Sercos III cable, shielded, star quad, 22 AWG stranded (7-wire), RAL 3020 (traffic red), M12 connector, SPEEDCON, 4-pos. to RJ45 connector/IP20, length: 3 m

Commercial data

Item number	1420517
Packing unit	1 pc
Minimum order quantity	50 pc
Note	Made to order (non-returnable)
Product key	AF1CJO
GTIN	4055626225296
Weight per piece (including packing)	229.1 g
Weight per piece (excluding packing)	226.5 g
Country of origin	PL

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Technical data

Product properties

Product type	Data cable preassembled
Number of positions	4
No. of cable outlets	1
Shielded	yes

Electrical properties

Nominal voltage U_N	48 V AC
	60 V DC
Transmission medium	Copper

Connector

Connection 1

Type	Plug straight M12 SPEEDCON
Number of positions	4
Locking type	SPEEDCON

Connection 2

Type	Plug straight RJ45
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Cable/line

Cable length	3 m
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Sercos III [93K]

Dimensional drawing	
Cable weight	68 kg/km
UL AWM Style	21694 (60 °C / 600 V)
Number of positions	4
Shielded	yes
Cable type	Sercos III [93K]
Conductor structure	1x4xAWG22/7, SF/TQ
Signal runtime	5.3 ns/m
Conductor structure signal line	7x 0.25 mm
AWG signal line	22
Conductor cross section	4x 0.34 mm ²

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Wire diameter incl. insulation	approx. 1.55 mm
External cable diameter	6.50 mm ±0.2 mm
Outer sheath, material	PVC
External sheath, color	signal red RAL 3020
Conductor material	Tin-plated Cu litz wires
Material wire insulation	PE
Single wire, color	white, yellow, blue, orange
Thickness, outer sheath	approx. 0.90 mm
Type of pair shielding	Aluminum-lined polyester foil
Overall twist	Star quad
Max. conductor resistance	≤ 120 Ω/km
Insulation resistance	≥ 0.5 GΩ*km
Coupling resistance	≤ 20.00 mΩ/m (at 10 Hz)
Wave impedance	100 Ω ±15 Ω (at 100 MHz)
Nominal voltage, cable	600 V
Test voltage Core/Core	2000 V (50 Hz, 1 min.)
Test voltage Core/Shield	2000.00 V (50 Hz, 1 min.)
Minimum bending radius, fixed installation	3 x D
Minimum bending radius, flexible installation	7 x D
Smallest bending radius, fixed installation	20 mm
Smallest bending radius, movable installation	46 mm
Flame resistance	according to UL 1685 (CSA FT 4)
Resistance to oil	Resistant to oil to a limited extent
Other resistance	UV resistant (according to UL 1581, Section 1200)
Ambient temperature (operation)	-40 °C ... 70 °C (cable, fixed installation)
	-40 °C ... 70 °C (Cable, flexible installation)
Ambient temperature (installation)	-20 °C ... 60 °C

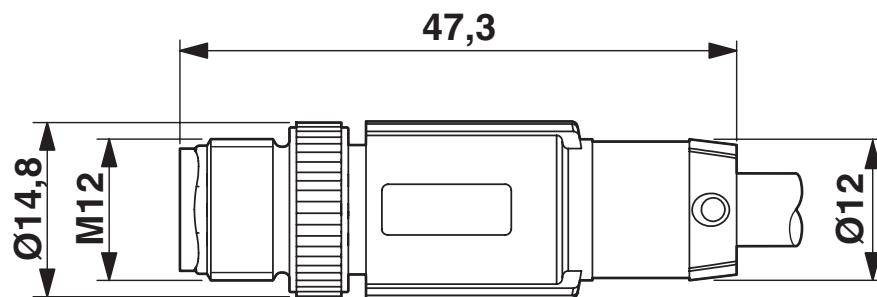
Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-10 °C ... 60 °C (cable, fixed installation)
	-5 °C ... 50 °C (Cable, flexible installation)

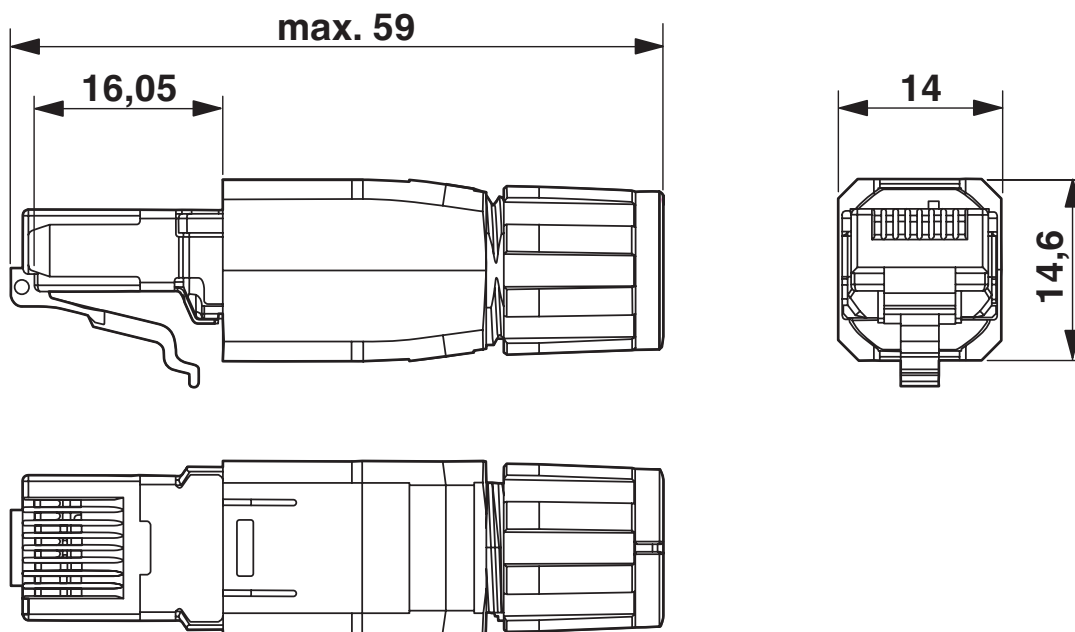
Drawings

Dimensional drawing



Plug, M12 x 1, straight, shielded

Dimensional drawing

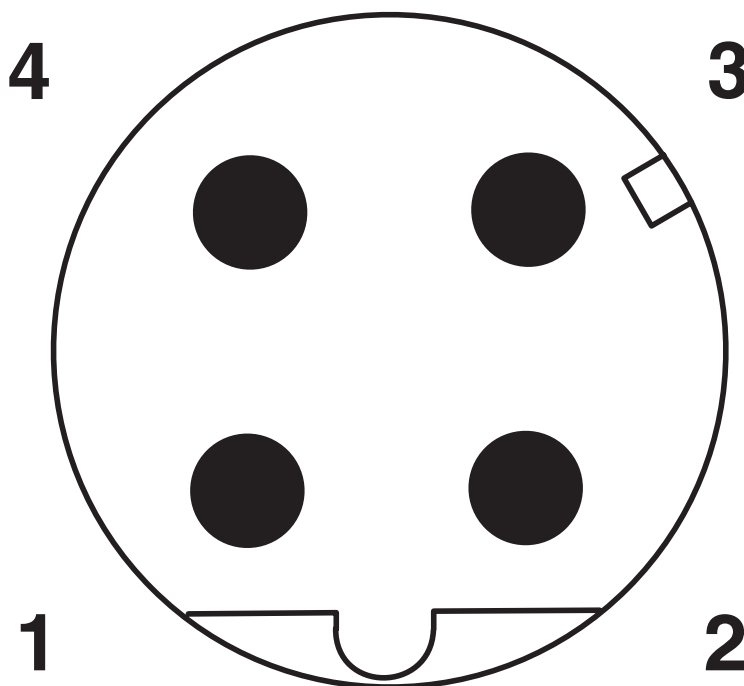


RJ45 connector, IP20

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Schematic diagram



Pin assignment M12 male connector, 4-pos., D-coded, male side

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Classifications

ECLASS

ECLASS-13.0	27060307
ECLASS-15.0	27060307

ETIM

ETIM 9.0	EC001855
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UNSPSC

UNSPSC 21.0	26121600
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Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

EU REACH SVHC

REACH candidate substance (CAS No.)	2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329)(CAS: 3147-75-9)
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